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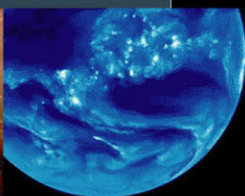
University

EP-2003-??-???-HQ

G S R P

GRADUATE STUDENT RESEARCH PROGRAM

Inspiring the next generation of explorers
...as only **NASA** can



FY 2004 NASA Program Announcement

Release Date:

September 22, 2003

Proposals Due:

February 2, 2004

Selection Announcement:

May 2004

<http://fellowships.hq.nasa.gov/GSRP/>

TABLE OF CONTENTS

Introduction	1
GSRP Program Managers	2
NASA Strategic Enterprises, Centers, and Facilities	4
Program Description.....	5
Award Description.....	6
General Eligibility Requirements	7
Reporting Requirements	8
Application Submission Guidelines.....	8
Application Submission	8
Evaluation Criteria.....	10
Proposal Preparation	10
<i>New Applicants</i>	11
<i>Renewal Applicants</i>	12
GSRP Research Areas for 2004	14
GSRP Application and Certifications	15
NASA GSRP Application.	16
GSRP Signature Form	17
Certification of Compliance with Applicable Executive Orders and U.S. Code	18
Privacy Act Statement.....	19
Certificate Regarding Debarment, Suspension, and Other Responsibility Matters.....	20
Certification Regarding Drug-Free Workplace Requirements	21
Certification Regarding Lobbying for Contracts, Grants, Loans, and Cooperative Agreements.....	22
Assurance of Compliance with the National Aeronautics Space Administration Regulations Pursuant to Nondiscrimination in Federally Assisted Programs.....	23
For GSRP Research Areas for 2002, please visit the GSRP website http://fellowships.hq.nasa.gov/gsrp/ .	

INTRODUCTION

This solicitation and the corresponding web site <http://fellowships.hq.nasa.gov/gsrp/> provide information about the Graduate Student Research Program (GSRP), eligibility, and the application process. Please spend a few minutes exploring the many research opportunities provided by this solicitation. Students are invited to select up to two (2) of the research opportunities.

Inquiries

Questions concerning policy matters should be directed to the Graduate Student Researchers Program (GSRP) National Program Manager:

Dr. Katie E. Blanding
Office of Education
Code NH
NASA Headquarters
Washington, DC 20546
Phone: (202) 358-0402
Fax: (202) 358-3032
katie.blanding@nasa.gov

General questions about how to submit the on-line application may be referred to gsrp@nasaprs.com or (202) 479-9376. Technical and scientific questions about specific research opportunities should be directed to the GSRP Program Managers listed for each Center and Enterprise on pages 4-5.

Important Program Dates

Solicitation Release Date:	Friday, September 19, 2003
Application Packets Due:	Monday, February 2, 2004
Selection Period:	May - August 2004
Announcements:	June – August 2004

GSRP Homepage: <http://fellowships.hq.nasa.gov/gsrp/>

Overview of the Application Process:

The submission process consists of the following:

1. On-line submission of GSRP application and required documents, and
2. Mail-in submission of official transcript, Faculty Adviser letter of recommendation, and signature form

All GSRP materials, including the electronic application and all accompanying mail-in materials must be received at the NASA Centers or NASA Peer Review Services, (NPRS) no later than **5:00 PM EST Monday, February 2, 2004**. Mail-in application materials such as letters of

recommendation, transcripts, and signature forms should be addressed and sent to the Program Managers listed on pages 4 and 5 of this solicitation.

Note that the NASA Enterprises and the Jet Propulsion Laboratory (JPL) manage their programs separately from the NASA Center GSRP Programs. Fellows selected by the Enterprises conduct their research at their respective universities. The remaining awards are distributed throughout the nine Centers and the Jet Propulsion Laboratory. Each of these entities has specific research programs and research facilities in keeping with the NASA mission and the goals of the GSRP.

GSRP PROGRAM MANAGERS

GSRP PROGRAM MANAGERS FOR THE NASA ENTERPRISES	
AND THE JET PROPULSION LABORATORY	
Ms. June Ellison Office of Biological and Physical Research Enterprise Code UP NASA Headquarters Washington, DC 20546-0001 Phone: (202) 358-0576 Fax: (202) 358-4330 june.ellison@nasa.gov	Ms. Anne N. Crouch Office of Earth Science Enterprise Code YB NASA Headquarters Washington, DC 20546-0001 Phone: (202) 358-0855 Fax: (202) 358-2770 anne.n.crouch@nasa.gov
Ms. Dolores Holland Office of Space Science Enterprise Code S NASA Headquarters Washington, DC 20546-0001 Phone: (202) 358-0734 Fax: (202) 358-3094 dolores.holland@nasa.gov	Mr. Melvin DeGree Office of Space Flight Enterprise Code M2 NASA Headquarters Washington, DC 20546-0001 Phone: (202) 358-4779 Fax: (202) 358-2818 mdegree@nasa.gov
Ms. Linda Rodgers NASA Jet Propulsion Laboratory Mail Stop 180-109 4800 Oak Grove Drive Pasadena, CA 91109-8099 Phone: (818) 354-3274 Fax: (818) 393-4977 Linda.L.Rodgers@jpl.nasa.gov	

GSRP PROGRAM MANAGERS AT NASA CENTERS

AMES RESEARCH CENTER**Ms. Brenda Collins**

Mail Stop 226-8

NASA Ames Research Center

Moffett Field, CA 94035-1000

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NASA Johnson Space Center

Houston, TX 77058

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Fax: (281) 483-9192

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Code N

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Fax: (661) 276-2134

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Mail Stop: XA-D1

NASA Kennedy Space Center

Kennedy Space Center, FL 32899

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Fax: (321) 867-2097

Eduardo.LopezDelcastillo-1@nasa.gov**GLENN RESEARCH CENTER****Dr. Robert Lawrence**

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NASA Glenn Research Center

Cleveland, OH 44135

Phone: (216) 433-2921

Fax: (216) 433-2348

Robert.F.Lawrence@grc.nasa.gov**LANGLEY RESEARCH CENTER****Mr. Lloyd B. Evans**

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NASA Langley Research Center

Hampton, VA 23681-2199

Phone: (757) 864-5209

Fax: (757) 864-6521

Lloyd.B.Evans@nasa.gov**GODDARD SPACE FLIGHT CENTER****Ms. Mablelene Burrell**

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Stennis Space Center, MS 39529

Phone: (228) 688-3832

Fax: (228) 688-7499

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Mail Code CD60

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Marshall Space Flight Center, AL 35812

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Marilyn.H.Lewis@msfc.nasa.gov

NASA STRATEGIC ENTERPRISES, CENTERS AND FACILITIES

NASA's overall program, as outlined in the Agency's Fiscal Year 2003 Strategic Plan, consists of six Strategic Enterprises. To support the Strategic Enterprises, NASA operates nine Centers nationwide, the contractor-operated Jet Propulsion Laboratory, and the Wallops Flight Facility. Each Enterprise covers a major area of the agency's research and development efforts. The specific research opportunities that exist within these Enterprises are described in this solicitation.

Aerospace Technology Enterprise (Code R)

The Aerospace Technology Enterprise contributes to the NASA vision by pioneering and developing advanced technologies. These technologies in turn, improve the air transportation system, access to space, and science missions. The Aerospace Technology Enterprise composes four themes:

- Aeronautics Technology
- Space Launch Initiatives
- Mission and Science Measurement Technology
- Innovative Technology Transfer Partnerships

See <http://www.aerospace.nasa.gov/>.

Biological and Physical Research Enterprise (Code U)

The space environment offers a unique laboratory in which to study biological and physical processes. Access to laboratories in space allows scientists to conduct research under conditions that have no parallel in the history in of science. Experiments that take advantage of this announcement extend from basic biology to quantum mechanics as well as from fundamental research to research with near-term application in medicine and industry. The Biological and Physical Research Enterprise has a primary role to play in encouraging and engaging the next generation of explorers, and it supports direct student participation in space research from the graduate level down through the primary-school level. The Enterprise is composed of three themes:

- Physical Science Research
- Biological Sciences Research
- Research Partnerships and Flight Support

See <http://spaceresearch.nasa.gov/>.

Earth Science Enterprise (Code Y)

NASA's vision to improve life here starts with the Earth Science Enterprise's study of planet Earth from space. The Enterprise seeks to understand and protect our home planet by advancing Earth-system science. The Earth Science Enterprise is composed of two themes:

- Earth System Science
- Earth Science Applications

See <http://www.earth.nasa.gov/>.

Space Flight Enterprise (Code M)

The Space Flight Enterprise provides many critical enabling capabilities that make possible much of the science, research, and exploration achievements of the rest of the Agency. The Space Flight Enterprise does this through four themes:

- International Space station
- Space Shuttle
- Space and Flight Support
- Expendable Launch Vehicles

See <http://www.hq.nasa.gov/osf/heds/>.

Space Science Enterprise (Code S)

The Space Science Enterprise seeks to answer fundamental questions about life in the universe: how it arose, what its mechanisms are, where in the solar system life may have originated or may exist today, and whether there are similar planetary environments around other stars where the signature of life can be found. The Space Science Enterprise is composed of five themes:

- Solar System Exploration
- Mars Exploration
- Astronomical Search for Origins
- Structure and Evolution of the Universe
- Sun-Earth Connection

See <http://spacescience.nasa.gov/>.

PROGRAM DESCRIPTION

The NASA Graduate Student Researchers Program (GSRP) awards fellowships for graduate study leading to masters or doctoral degrees in the fields of science, mathematics, and engineering related to NASA research and development.

Initiated in 1980, the goal of NASA's GSRP is to cultivate research ties to the academic community, help to meet the continuing needs of the nation's aeronautics and space effort by increasing the number of highly trained scientists and engineers in aeronautics and space related disciplines, and to broaden the base of students pursuing advanced degrees in science, mathematics, and engineering. The GSRP is inextricably tied to NASA's mission of preparing the next generation of explorers, as only NASA can. In this vein, NASA Research and

Development Centers are uniquely designed to provide excellence in aeronautics and space research. Research opportunities stated in this solicitation are assessed and updated annually to complement the mission requirements of NASA. Research areas are in disciplines that lead to aeronautics and space careers.

The program supports approximately 300 graduate students annually. NASA's discipline scientists and technologists evaluate applications based upon the academic transcripts, research proposal, Faculty Research Adviser's recommendation, and the proposed utilization of NASA Center or university research facilities.

Award Description

A student receiving support under the GSRP does not incur any formal obligation to the U.S. Government. The objectives of this program will be served best if the student actively pursues research, teaching, or employment in NASA-related fields after completion of graduate studies.

Amount and Duration: Fellowships are awarded for one year as training grants in the amount of \$24,000. This amount includes an \$18,000 student stipend, a student allowance of \$3,000, and a \$3,000 university allowance. Awards are renewable up to three years based on satisfactory academic advancement, research progress, and available funding. The Program Manager and the Technical Adviser at the NASA Center or Enterprise Office must approve renewals. All applications are due annually, by the deadline posted on the GSRP Website. The deadline for the 2004 applications is 5:00 p.m. EST, Monday, February 2, 2004.

Allowable Expenses: The student stipend of \$18,000 may cover tuition, room and board, books, software, meal plans, school and laboratory supplies, and other related expenses. The \$3,000 Student Allowance may be used for additional program related travel, and other expenses agreed upon by the student and the Faculty Research Adviser. The University Allowance of \$3,000 is a discretionary award made to the Research Adviser. The NASA Program Manager must approve alternative uses of GSRP funding. The GSRP is a Fellowship to support graduate education, and does not provide University Overhead.

GSRP grant funds may not be used for the purchase of any equipment, including computers.

Travel: A request for international travel must be submitted to the GSRP Center or Enterprise Program Manager and must have the concurrence of the University Authorizing Official and the Faculty Research Adviser. Requests should be submitted 15-30 days prior to the proposed travel. Requests submitted after the travel has been completed may be denied. For each international trip, the student or faculty research adviser must submit a written request on university letterhead stating the purpose of the travel, estimated cost, travel dates, and GSRP grant number.

Unused Funds and Transfer of Award to Another Student: If a student withdraws **within the first half of the award year**, the university may request a replacement student with similar achievement and research objectives to complete the remaining months of the current award. Since this is a highly competitive program, replacement students will be recommended from NASA's current database of alternate applicants who have passed the review process, and met all other requirements for the award.

The Faculty Research Adviser and the University Authorizing Official must provide a statement to the NASA Program Manager advising of any change in the student's enrollment status.

Replacement students are not considered as renewals for subsequent awards. Upon expiration of the replacement award, students must submit an application and compete for future GSRP awards. Replacement students must follow the guidelines for "new applicants" to apply for future awards.

Tax Questions: All questions concerning taxes should be directed to the Internal Revenue Service. Refer to IRS Publication 520, "Scholarships and Fellowships," and Publication 508, "Tax Benefits for Work-Related Education," for further information. Both publications can be accessed at the following web site address http://www.irs.gov/prod/forms_pubs/pubs/.

General Eligibility Requirements

- Applicants must be currently enrolled or accepted as a full-time graduate student in an accredited U.S. college or university.
- Applicants must be U.S. citizens.
- Students may apply at any time during their graduate program, or prior to receiving their baccalaureate degree, provided they have been accepted to an accredited graduate program at a U.S. college or university.
- All applicants must have a Faculty Adviser from the institution where they plan to receive their graduate degree. Graduating seniors accepted by a graduate school must contact their graduate school department and request an adviser to support the NASA research funded under the GSRP.

Identification of an Adviser is important, since the awards are made to the Research Adviser at the university on behalf of the student.

Individuals accepting this award may not concurrently receive other Federal fellowships or traineeships. The exception to this policy is Section 178(a) of Title 38, U.S. Code, which allows a student to receive concurrent educational benefits from the Department of Veterans Affairs.

All underrepresented minorities, women, and persons with disabilities are strongly urged to apply to the GSRP.

Reporting Requirements

It is the responsibility of the institution receiving a NASA GSRP award to ensure submission of a final report on the fellow's research and academic progress. This report is due no later than 90 days after the termination date of the award. The report must include the degree granted, important student achievements (e.g., thesis title, other published papers, presentations, awards, honors), and employment or other future plans. This report should be submitted to the appropriate NASA Enterprise or NASA Center Program Manager.

All students must complete an annual evaluation of the GRSP award and their related experiences by accessing the online evaluation form at <http://ehb2.gsfc.nasa.gov/edcats/>.

APPLICATION SUBMISSION GUIDELINES**Application Submission**

All new and renewal applicants must follow the on-line application process. This process requires applicants to complete the on-line GSRP application form and to upload other required documents. Certain documentation cannot be submitted electronically. Documents that must be mailed include: the official transcript, Faculty Research Adviser's letter of recommendation, and the Signature Form. Each of the NASA Centers or NPRS must receive **one copy of** these accompanying materials **no later than NLT 5:00 PM EST, February 2, 2004**. The complete submission process is outlined below:

Step 1: Electronic Submission of GSRP Application: To access, complete, and submit the on-line application, go to <http://fellowships.hq.nasa.gov/grsp/>. Select the "APPLY ONLINE" option and follow the instructions. **New applicants** must upload the following documents: the research proposal, a biographical sketch of the student and a biographical sketch of the Faculty Research Adviser. **Renewal applicants** only need to upload their progress report. The final step in the electronic portion of the application process is to print out the GSRP Signature Form. Applicants must collect original signatures on this form and submit it by mail (see step 2).

Step 2: Mail In Required Documentation: The following documents must be received at each of the NASA Centers or NPRS **no later than 5:00 PM EST on February 2, 2004**. The addresses for the NASA Center Program Managers are provided under the "GSRP Program Managers" section of this solicitation on page 4. The NPRS address is provided under number 3 of this section below. Applicants may go to the GSRP website located at <http://fellowships.hq.nasa.gov/grsp/> at any time during the application process to check the status of their application.

1. The GSRP Signature Form. This form must bear the original signatures of the applicant, Faculty Adviser, and the university's authorizing official.
2. Faculty Adviser Letter of Recommendation. A letter of recommendation must be provided from your graduate university research adviser who will serve as the Principal Investigator for your proposed research. This letter must be signed by the Research Adviser and mailed to the appropriate Center or NPRS.
3. Recall that the NASA Enterprises and the Jet Propulsion Laboratory (JPL) manage their GSRP separately from the NASA Centers. Mail-In documents for the Enterprises and the Jet Propulsion Laboratory must be mailed directly to the following address:

NASA Peer Review Services (NPRS)
Attn: Code N
Graduate Student Researchers Program (GSRP)
500 E St., SW, Suite 200
Washington, DC 20024-2760
Tel: 202-479-9030

4. Official Transcript. An official transcript that lists all university coursework (undergraduate and graduate) is required from **new applicants**. **Renewal applicants** must provide an official transcript that lists all courses taken since the previous GSRP award. Students should request their transcripts well in advance of the deadline to ensure arrival to the selected NASA Centers or Enterprise offices **NLT 5:00 PM EST on February 2, 2004**.

Checklist: New Applicant (Includes Recent College Graduates and Graduating Seniors)

1. Electronic Submission of Application (including contact information, abstract, budget figures, and description of anticipated use of Center or university research facilities).
2. Electronic Upload of five-page Proposal/Project Description.
3. Electronic Upload of Biographical Sketches of Faculty Adviser and Student.
4. Official University Transcripts from all undergraduate institutions attended.
5. Letter of Recommendation from the Faculty Adviser.
6. GSRP Signature Form.

Checklist: Renewal Applicant

1. Electronic Submission of Application (including contact information, abstract, budget figures, and description of changes from previous year of anticipated use of Center or university research facilities).
2. Electronic Upload of Progress Report.
3. Official University Transcript from the Student's Institution.
4. Letter of Recommendation from the Faculty Adviser.
5. GSRP Signature Form.

To ensure the preparation of a competitive proposal, students should collaborate with a faculty member **and** with a potential NASA Technical Adviser to identify a project. NASA Technical Advisers are listed at the end of each research opportunity in the 2004 GSRP Solicitation. Students are advised to solicit guidance, review, and commentary on the proposal from their Faculty Adviser prior to submission. The student must write the GSRP proposal. For a complete explanation of required materials for both new and renewal applicants, see the section on "Proposal Preparation."

New awards are scheduled to begin the first of July, August, or September 2004. Incomplete or late proposals may not be accepted or reviewed. The starting date for renewal awards will be one year from the start date of the original fellowship.

Evaluation Criteria

NASA Headquarters, Centers, and the Jet Propulsion Laboratory will review applications and make selections for participation in this program. Selection is based on:

1. A five page research proposal in response to the Research Opportunities listed in this solicitation;
2. Transcripts. New applicants must provide transcripts showing undergraduate and graduate coursework. Renewals must provide a transcript showing all courses taken since the previous GSRP award;
3. The proposed utilization of Center or University research facilities; and
4. The recommendation of the Faculty Adviser.

Fellows selected by Centers must spend some period of time in residence at the Center, taking advantage of the unique research facilities of the installation and working with Center personnel. The projected use of NASA Center facilities is an important factor in the selection of Center Fellows.

Proposal Preparation

Applicants may respond to no more than two research opportunities in response to this solicitation. Each proposal must address a single research topic. Proposals should be coordinated with a NASA Technical Adviser to determine appropriateness for NASA research and development. Applicants should clearly indicate which Enterprises and/or Centers you are interested in by checking the appropriate selection on the application. Program Managers at NASA Centers and Enterprises will have electronic access and capability for on-line review of proposals.

General Formatting Guidelines: The application should follow the following guidelines:

- A 5-page proposal in response to the Research Opportunities announced in the 2004 GSRP Solicitation.

- Submitted (uploaded) reports (Anticipated Use of Research Facilities Report, Proposal/Project Description or Research Progress Reports, and Biographical Sketches) should not exceed the page limits (including associated tables, forms, charts, graphics, and appendices or references).
- Documents uploaded should be formatted with one-inch margins (top, bottom, left and right), and 12-point font. Single spacing is recommended.

A complete package for **new applicants** must contain the following items:

APPLICATION MATERIALS—NEW APPLICANTS

- 1. Application**—The application must be completed on-line and includes the following components:

Abstract—Proposal abstracts should concisely summarize the proposed research and its relationship to the NASA mission. The abstract should not exceed 100 words in length. The abstract is in addition to the 5-page proposal.

Budget Figures—The award includes a student stipend, a student allowance, and a university allowance. The student stipend of \$18,000 may cover tuition, room and board, books, software, meal plans, school and laboratory supplies, and other related expenses. No equipment may be purchased with these funds. The \$3,000 Student Allowance may be used for additional program related travel, and other expenses agreed upon by the student and the Faculty Research Adviser. The University Allowance of \$3,000 is a discretionary award to the Research Adviser. The NASA Program Manager must approve alternative uses of GSRP funding. The GSRP is a Fellowship to support graduate education, and does not provide University Overhead.

Anticipated Use of Center or University Facilities and Resources—All students must indicate the NASA or University facilities and resources to be used in support of the research, including an estimate of any computer time required. Students are strongly encouraged to contact the appropriate NASA Technical Adviser listed for the proposed research area or their Faculty Adviser to coordinate these activities.

- 2. Proposal/Project Description**—Upload. A five-page proposal that is authored by the applicant must be submitted online. The proposal should describe the student's proposed or ongoing research.

- 3. Biographical Sketches of the Faculty Adviser and Student**—Upload. For new applications, background information on the Faculty Adviser and student is required. Provide short biographical sketches from each (not to exceed two pages) that list the following information: name, current position, title, department, university address, phone number, and principal publications. The sketches should include relevant career experience, research, awards, scholarships, and other relevant accomplishments. This requirement includes all applicants (new applicants, graduating seniors, and renewals).

APPLICATION MATERIALS—NEW APPLICANTS (Continued)

4. **Official Transcript**—Mail. New applicants are required to submit an official transcript that lists all university coursework (undergraduate and graduate).
5. **Letter of Recommendation**—Mail. The Faculty Adviser must provide a signed one-page letter of recommendation on behalf of the student. The letter must include a statement indicating the level of assistance provided to the student in the preparation of the GSRP proposal
6. **Signature Form**—Mail. Proposals will not be accepted without these required signatures: student signature, Faculty Adviser signature, and institutional authorizing official signature. By signing, the authorizing official commits the university and confirms that the Certification Requirements have been met. Certifications of Compliance with Applicable Executive Orders and U.S. Code are listed below. (See also pages 17-22.)
 - (i) Privacy Act Statement
 - (ii) Certification Regarding Debarment, Suspension, and Other Responsibility Matters,
 - (iii) Certification Regarding Drug-Free Workplace Requirements,
 - (iv) Certification Regarding Lobbying for Contracts, Grants, Loans, and
 - (v) Assurance of Compliance with NASA Regulations Pursuant to Nondiscrimination in Federally Assisted Programs.

A complete package for **renewal applicants** must contain the following items:

APPLICATION MATERIALS—RENEWAL APPLICANTS

1. **Application**—The application must be completed online and includes the following components:

Abstract—Proposal abstracts should concisely summarize the ongoing research and its relationship to the NASA mission. The abstract should not exceed 100 words in length.

Budget Figures—**Budget Figures**—The award includes a student stipend, a student allowance, and a university allowance. The student stipend of \$18,000 may cover tuition, room and board, books, software, meal plans, school and laboratory supplies, and other related expenses. No equipment may be purchased with these funds. The \$3,000 Student Allowance may be used for additional program related travel, and other expenses agreed upon by the student and the Faculty Research Adviser. The University Allowance of \$3,000 is a discretionary award to the Research Adviser. The NASA Program Manager must approve alternative uses of GSRP funding. The GSRP is a Fellowship to support graduate education, and does not provide University Overhead.

Anticipated Use of Center or University Facilities and Resources—All students must indicate the NASA or University facilities and resources to be used in support of the research, including an estimate of any computer time required. Indicate any change in your requirements for use of facilities and resources.

APPLICATION MATERIALS—RENEWAL APPLICANTS (Continued)

- 2. Research Progress Report—Upload.** A report that is authored by the applicant discussing the status of the research must be provided for renewal. This report must describe the status of the GSRP funded research during the previous year of support. The report should indicate research plans to be supported with renewal funding. This statement should not exceed five pages in length.
- 3. Official Transcript—Mail.** Renewal applicants are required to submit an official transcript that lists all courses taken since the previously submitted application.
- 4. Letter of Recommendation—Mail.** The Faculty Adviser must provide a signed one-page letter of recommendation on behalf of the student. The letter must include a statement indicating the level of assistance provided to the student in the preparation of the GSRP proposal.
- 5. Signature Form—Mail.** Proposals will not be accepted without these required signatures: student signature, Faculty Adviser signature, and institutional authorizing official signature. By signing, the authorizing official commits the university and confirms that the Certification Requirements have been met. Certifications of Compliance with Applicable Executive Orders and U.S. Code are listed below. (See also pages 17-22.)
 - (i) Privacy Act Statement
 - (ii) Certification Regarding Debarment, Suspension, and Other
 - (iii) Responsibility Matters,
 - (iv) Certification Regarding Drug-Free Workplace Requirements,
 - (v) Certification Regarding Lobbying for Contracts, Grants, Loans, and
 - (vi) Assurance of Compliance with NASA Regulations Pursuant to
 - (vii) Nondiscrimination in Federally Assisted Programs.

GSRP RESEARCH AREAS FOR 2004

The following chart shows research disciplines that support the 2004 GSRP for the Enterprises (Codes S, U, and Y). This is not an exclusive indication of the disciplines supported, but a quick reference to the array of academic areas associated with each NASA organization.

Opportunities for Space Flight are technology-based, supporting and enabling science research. Refer to page 7 of this solicitation for a listing of Code M opportunities.

	Code S	Code U	Code Y	ARC	DFRC	GRC	GSFC	KSC	JPL	JSC	LaRC	MSFC	SSC
Aeronautical		x	x	x	x	x	x			x	x	x	
Chemical		x	x	x	x	x		x	x	x	x		x
Electrical			x		x	x	x	x	x	x	x		x
Mechanical		x	x		x	x	x	x		x	x	x	x
Metallurgy/ Materials				x		x		x		x	x	x	
Engineering		x	x	x	x	x	x	x	x	x	x	x	x
Astronomy	x			x			x		x			x	
Chemistry	x		x	x		x		x	x		x		
Physics	x	x	x	x		x	x	x	x		x	x	x
Physical Science	x	x	x	x		x	x	x	x			x	x
Mathematics		x		x				x			x		
Computer Science	x		x	x		x		x	x	x	x		x
Math/Comp	x		x	x		x	x	x	x		x	x	
Biological Science	x	x	x	x				x				x	x
Life Science		x		x				x	x	x			
Social Science		x		x								x	
Atmospheric Science	x		x	x			x		x		x	x	
Geol Science	x		x	x			x		x		x		x
Oceano- graphy			x				x		x				x
Environ- mental Science		x	x	x			x	x				x	x
Psychology		x		x				x		x	x		
Other Sciences	x	x	x	x		x	x	x	x	x	x	x	x

CODE M	HQ OFFICE OF SPACE FLIGHT	DFRC	Dryden Flight Research Center	JSC	Johnson Space Center
CODE S	HQ Office of Space Science	GRC	Glenn Research Center	LARC	Langley Research Center
CODE U	HQ Office of Biological and Physical Research	GSFC	Goddard Space Flight Center	MSFC	Marshall Space Flight Center
CODE Y	HQ Office of Earth Science	KSC	Kennedy Space Center	SSC	Stennis Space Center
ARC	Ames Research Center	JPL	Jet Propulsion Laboratory		

GSRP APPLICATION AND CERTIFICATIONS

The following pages contain sample forms to support the GSRP application, including the application page, the signature form for the University Authorizing Official and the Faculty Adviser, and full-text versions of all applicable certifications.

- NASA Application for the Graduate Student Researchers Program (GSRP)
- Signature Form
- Certification of Compliance with Applicable Executive Orders and U. S. Code
- Privacy Act Statement
- Certification Regarding Debarment, Suspension, and Other Responsibility Matters
- Certification Regarding Drug-Free Workplace Requirements Grantees Other Than Individuals
- Certification Regarding Lobbying for Contracts, Grants, Loans, and Cooperative Agreements
- Assurance of Compliance with the NASA Regulations Pursuant to Nondiscrimination in Federally Assisted Programs

By signing the GSRP Signature Form, the Institutional Authorizing Official confirms that he/she has read the abovementioned certifications and further confirms compliance with all the provisions, rules, and stipulations set forth in the certifications contained in this solicitation.

NASA GSRP Application

STUDENT INFORMATION										
Last Name _____		First Name _____		MI _____		Birth Date _____				
Birth City/Town and State _____				Birth Country _____						
Permanent Contact Information			Departmental Contact Information			Hours Completed				
			Institution:			Bachelors		Master's		Doctorate
Street:			Department:							
City:			Street:			GPA (4.0 Scale)				
State:			City:			Bachelors		Master's		Doctorate
Zip:			State:			Zip:				
Phone:			Phone:			Expected Date of Graduation:				
Email:			Email:			Bachelors		Master's		Doctorate
Fax:			Fax:							
Degree to be supported by this award (indicate one): MS PhD										
Academic Major: _____										
Colleges or Universities Attended <i>(list current institution first)</i>										
Institution		Location		Dates Attended		Degree		Major		
Applicant Background										
Gender		<input type="checkbox"/> Male <input type="checkbox"/> Female		Individual with Disabilities <input type="checkbox"/> Yes <input type="checkbox"/> No						
Race/Ethnicity (Check all that apply)		<input type="checkbox"/> White or Caucasian		<input type="checkbox"/> African American or Black		<input type="checkbox"/> Hispanic or Latino				
		<input type="checkbox"/> Native Hawaiian or Other Pacific Islander		<input type="checkbox"/> Native American Indian or Alaskan Native		<input type="checkbox"/> Asian				
Proposal Information										
Type of Proposal		<input type="checkbox"/> New		<input type="checkbox"/> Second Year		<input type="checkbox"/> Third Year		<input type="checkbox"/> Other		
If Renewal, enter the Grant Number: NGT _____					Proposed Start/Renewal Date: ____/____/____					
Research Title:										
Submission Information (Check no more than 2 boxes)										
Headquarters		<input type="checkbox"/> Space Sciences		<input type="checkbox"/> Biological and Physical Research		<input type="checkbox"/> Earth Science				
NASA Centers	<input type="checkbox"/>	Ames (ARC)	<input type="checkbox"/>	Dryden (DFRC)	<input type="checkbox"/>	Glenn (GRC)	<input type="checkbox"/>	Goddard (GSFC)	<input type="checkbox"/> Jet Propulsion Lab. (JPL)	
	<input type="checkbox"/>	Johnson (JSC)	<input type="checkbox"/>	Kennedy (KSC)	<input type="checkbox"/>	Langley (LaRC)	<input type="checkbox"/>	Marshall (MSFC)	<input type="checkbox"/> Stennis (SSC)	
If Renewal, enter the name of the Center Research Adviser:				_____						

GSRP SIGNATURE FORM		
Applicant's Institution:		
APPLICANT:	FACULTY ADVISER:	INSTITUTIONAL AUTHORIZING OFFICIAL:
Name:	Name:	Name:
Major:	Department:	Title:
Street:	Street:	Street:
City:	City:	City:
State:	State:	State:
ZIP:	ZIP:	ZIP:
Phone:	Phone:	Phone:
Email:	Email:	Email:
APPLICANT CERTIFICATION		
<p><i>I certify that I am a citizen of the United States and that I am or will be a full-time graduate student at the university during the period for which this application/proposal is made. I certify that the statements made in this application are true and complete to the best of my knowledge. I also certify that I am the principal author of the proposal submitted in response to the GSRP Announcement and that it was composed in accordance with the policies at my institution.</i></p>		
Signature: _____ Date: _____		
FACULTY ADVISER CERTIFICATION		
<p><i>I certify that the student named above is the principal author of the proposal submitted in response to the GSRP Announcement and that it was composed in accordance with the policies at this institution.</i></p>		
Signature: _____ Date: _____		
INSTITUTIONAL AUTHORIZING OFFICIAL CERTIFICATION		
<p style="text-align: center;">Certification of Compliance with Applicable Executive Orders and U.S. Code</p> <p>By signing and submitting the proposal identified in this GSRP Application/Proposal Cover Sheet in response to the request for a proposal under the Graduate Student Researchers Program, the Authorizing Official of the proposing institution, as identified below:</p> <ul style="list-style-type: none"> • Certifies that the statements made in this proposal are true and complete to the best of his/her knowledge; • Agrees to accept the obligations to comply with NASA award terms and conditions if an award is made as a result of this proposal; and • Confirms compliance with all provisions, rules, and stipulations set forth in the four Certifications contained in this solicitation [namely, (1) Certification Regarding Debarment, Suspension, and Other Responsibility Matters-Primary Covered Transactions; (2) Certification Regarding Drug-Free Workplace Requirements Grantees Other Than Individuals; and (3) Certification Regarding Lobbying for Contracts, Grants, Loans, and Cooperative Agreements; and (4) Assurance of Compliance with the National Aeronautics and Space Administration Regulations Pursuant to Nondiscrimination in Federally Assisted Programs. <p>I understand that full-text versions of the above certifications are available at http://fellowships.hq.nasa.gov/gsrp/certifications </p>		
Institutional Authorizing Official: _____ Date: _____		

Certification of Compliance with Applicable Executive Orders and U.S. Code

The following supplements are the full text of certifications related to NASA grant awards. Please read the certifications carefully. By signing and submitting the proposal identified in the GSRP Application/Proposal Cover Sheet, (see Appendix A), in response to the request for a proposal under the Graduate Student Researchers Program, the Authorizing Official of the proposing institution, as identified below:

1. Certifies that the statements made in this proposal are true and complete to the best of his/her knowledge;
2. Agrees to accept the obligations to comply with NASA award terms and conditions if an award is made as a result of this proposal.

Privacy Act Statement

General

Pursuant to Public Law 93-579, Privacy Act of 1974, as amended (5U.S.C. §552a), the following information is being provided to persons who are asked to provide information to obtain a NASA Graduate Student fellowship.

Authority

This information is collected under the authority of the National Aeronautics and Space Act, Publication 85-568, as amended, 42 U.S.C. §2451, et. seq.

Purposes and Uses

This information requested on the application form will be used to determine your eligibility for participation in the NASA Graduate Student Researchers Program. The information requested regarding your ethnic/racial/disability status will be used to determine the degree to which members of each ethnic/racial/disability group are being reached by NASA's announcement of this program, and will not affect your application. Additionally, NASA may disclose this information to other organizations, and other governmental agencies, as well as Congressional offices in response to an inquiry made on your behalf. Disclosure may also be made to concerned parties in the course of litigation, to law enforcement agencies, and to other Federal agencies in exchanging information pertinent to an agency decision.

Effects of Nondisclosure

Furnishing the information on the application form is voluntary, but failure to do so may result in NASA's inability to determine eligibility for participation and selection for award in the Graduate Student Researchers Program. However, your application will not be affected if you choose not to provide information on your ethnic, racial, or disability status.

Definitions for Applicant Background

- American Native or Alaskan American: A person having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition.
- Hispanic: A person of Mexican, Puerto Rican, Cuban, or South American or other Spanish culture or origin, regardless of race.
- Asian: A person having origins in any of the original peoples of East Asia, Southeast Asia or the Indian subcontinent. This area includes, for example, China, India, Indonesia, Japan, Korea, and Vietnam.
- Pacific Islander: A person having origins in any of the original peoples of Hawaii; the U.S. Pacific territories of Guam, American Samoa, and the Northern Marianas; the U.S. Trust Territory of Palau; the islands of Micronesia and Melanesia; or the Philippines.
- African American, not of Hispanic origin: A person having origins in any of the black racial groups of Africa.
- White, not of Hispanic Origin: A person having origins in any of the original peoples of Europe, North Africa, or the Middle East.
- Individual with Disabilities: An individual having a physical or mental impairment that substantially limits one or more major life activities; who has a record of such impairment; or who is regarded as having such impairment.

**Certification Regarding Debarment, Suspension, and Other Responsibility Matters
Primary Covered Transactions**

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 34 CFR Part 85, Section 85.510, Participant's responsibilities. The regulations were published as Part VII of the May 26, 1988 Federal Register (pages 19160 - 19211). Copies of the regulation may be obtained by contacting the U.S. Department of Education, Grants and Contracts Service, 400 Maryland Avenue, SW (Room 3633 GSA Regional Office Building No. 3), Washington, DC 20202-4725, telephone (202) 732-2505.

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or Local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or Local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or Local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**Certification Regarding Drug-Free Workplace Requirements
Grantees Other Than Individuals**

This certification is required by the regulations implementing the Drug-Free Workplace Act of 1988, 34 CFR Part 85, Subpart F. The regulations, published in the January 31, 1989 Federal Register, require certification by grantees, prior to award, that they will maintain a drug-free workplace. The certification set out below is a material representation of fact upon which reliance will be placed when the agency determines to award the grant. False certification or violation of the certification shall be grounds for suspension of payments, suspension or termination of grants, or government wide suspension or debarment (see 34 CFR Part 85, Sections 85.615 and 85.620). This grantee certifies that it will provide a drug-free workplace by:

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing a drug-free awareness program to inform employees about
 - (1) the dangers of drug abuse in the workplace;
 - (2) the grantee's policy of maintaining a drug-free workplace;
 - (3) any available drug counseling, rehabilitation, and employee assistance programs, and
 - (4) the penalties that may be imposed upon employees for drug abuse violations in the workplace;
- (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will (1) Abide by the terms of the statement; and (2) Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction;
- (e) Notifying the agency within ten days after receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted -
- (f) Taking one of the following actions, within 30 days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted;
 - (1) Taking appropriate personnel action against such an employee, up to and including termination; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraph (a), (b), (c), (e), and (f).

**Certification Regarding Lobbying
for Contracts, Grants, Loans, and Cooperative Agreements**

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certificate shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000 for each such failure.

**Assurance of Compliance with the National Aeronautics and Space Administration
Regulations Pursuant to Nondiscrimination in Federally Assisted Programs**

The Institution, corporation, firm, or other organization on whose behalf this assurance is signed, hereinafter called "Applicant" HEREBY AGREES THAT it will comply with Title VI of the Civil Rights Act of 1964 (PL 88-352), Title IX of the Education Amendments of 1962 (20 U.S.C. 1680 et seq.), Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and the Age Discrimination Act of 1975 (42 U.S.C. 16101 et seq), and all requirements imposed by or pursuant to the Regulation of the National Aeronautics and Space Administration (14 CFR Part 1250) (hereinafter call "NASA") issued pursuant to these laws, to the end that in accordance with these laws and regulations, no person in the United States shall, on the basis of race, color, national origin, sex, handicapped condition, or age be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Applicant receives federal financial assistance from NASA; and HEREBY GIVE ASSURANCE THAT it will immediately take any measure necessary to effectuate this agreement.

If any real property or structure thereon is provided or improved with the aid of federal financial assistance extended to the Applicant by NASA, this assurance shall obligate the Applicant, or in the case of any transfer of such property, any transferee, for the period during which the real property or structure is used for a purpose for which the federal financial assistance is extended or for another purpose involving the provision of similar services or benefits. If any personal property is so provided, this assurance shall obligate the Applicant for the period during which it retains ownership or possession of the property. In all other cases, this assurance shall obligate the Applicant for the period during which the federal financial assistance is extended to it by NASA.

THIS ASSURANCE is given in consideration of and for the purpose of obtaining any and all federal grants, loans, contracts, property, discounts, or other federal financial assistance extended after the date hereof to the Applicant by NASA, including installment payments after such date on account of applications for federal financial assistance which were approved before such date. The Applicant recognized and agrees that such federal financial assistance will be extended in reliance on the representations and agreements made in this assurance, and that the United States shall have the right to seek judicial enforcement of this assurance. This assurance is binding on the Applicant, its successors, transferees, and assignees, and the person or persons whose signatures appear below are authorized to sign on behalf of the Applicant.

NASA FORM 1206 AUG 97 PREVIOUS EDITIONS ARE OBSOLETE